

39. A wiper as defined in claim 26, wherein said anti-microbial formulation covers from about 20% to about 40% of said at least one surface of said absorbent web.

40. A wiper as defined in claim 26, wherein said anti-microbial formulation covers from about 10% to about 60% of both surfaces of said absorbent web.

41. A wiper as defined in claim 26, wherein said fibers of said absorbent web comprise pulp fibers.

42. A wiper as defined in claim 26, wherein said fibers of said absorbent web comprise synthetic fibers.

REMARKS

Please reconsider the rejections of the claims in light of the following arguments and allow the pending claims.

First, the Examiner had stated in the present office action that the Information Disclosure Statement filed on June 11, 2001, was received by the office, but was misplaced during processing and was, therefore, not considered. In the action, the Examiner had requested that applicants provide replacement copies of the references cited in the IDS. In a voice mail left for Neil Jones on January 29, 2003, the Examiner agreed to obtain these references from a related case within the patent office. Therefore, applicants are not supplying the replacement copies as directed in the present office action and respectfully requests the Examiner to indicate consideration of each.

Second, the Examiner rejected claims 4, 7, 8, 12, 14-24, 26, 28, 30, 31, 36, and 38-42 under 35 U.S.C. § 112, second paragraph as being indefinite for several reasons. The Examiner rejected claims 4 and 28 for reciting “comprises” followed by a latex adhesive. The Examiner felt the claim would read better by amending “comprises” to “is.” Applicants contend that claims 2 and 27 (the claims from which claims 4 and 28 depend) effectively preserves the open-ended nature of “comprises a polymer.” However, applicants have amended claims 4 and 28, thereby mooting the Examiner’s rejection, but have maintained the breadth of claims 4 and 28 in claim 2 and 27.

The Examiner had rejected claims 7 and 30 because the claims would read better by deleting “anti-microbial formulation comprises a” and inserting after “source of”, “anti-microbial metal”, and deleting “of a metal” and inserting “are”. Applicants contend that claim 6 (the claim from which claim 7 depends) effectively preserves the open-ended nature of “comprises a source of anti-microbial metal ions.” However, applicants have amended claims 7 and 30, thereby mooting the Examiner’s rejection, but have maintained the breadth of claim 7 in claim 6.

The Examiner had also rejected claims 8, 12, 31 and 36 because they are broader in scope from claims 7, 11, 28 and 30 in view of the expression “comprises”. Applicants contend that claims 7, 11, 28 and 30 (the claims from which claims 8, 12, 31 and 36 depend) effectively preserves the open-ended nature of “comprises” for each instance in claims 8, 12, 31 and 36. Applicants have amended claims 8, 12, 31 and 36, thereby mooting the Examiner’s rejection, but have maintained the breadth of claims 8, 12, 31 and 36 in claims 7, 11, 28 and 30.

The Examiner had rejected claims 14-23, 19-24, and 38-42 as lacking antecedent basis with respect to “formulation” and “web”. The Examiner suggested amending the claims to “anti-microbial formulations” and “absorbent web.” Applicants have amended claims 14-23, 19-24, and 38-42, thereby mooting the Examiner’s rejection.

Third, the Examiner rejected claims 1-3, 6-8, 13, 15-19, 22-27, 30, 31 and 37-42 under 35 U.S.C. § 102(b) as being anticipated by EPO 869,216 (‘216). To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 1383, 58 USPQ2d 1286, 1291 (Fed. Cir. 2001); Scripps Clinic & Research Foundation v. Genentech, Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

Applicants respectfully submit that the presently claimed invention differs from ‘216. For example, ‘216 teaches the use of low-water soluble biocidal compositions. See page 3, lines 53-54. The low-water soluble biocidal compositions of ‘216 are used for keeping the surfaces of sponges and wipes free from microbial growth. Moreover, ‘216 teaches that it is preferred to have biocidal compositions which exhibit increasingly lower and lower water solubilities. See page 3, lines 54-58. Because of the biocidal compositions’ low water solubility, any liquid that the ‘216 sponges or wipes leave on a surface would be *substantially free* of the biocidal composition. Therefore, ‘216 fails to anticipate applicant’s claim 1 limitation of which formulation releases sufficient anti-microbial agent into the retained liquid after each of at least five normal cycles so that the retained liquid is an anti-microbial solution.

The Examiner also stated that the above cited limitation of claim 1 and claims 16-19 and 38-42 was *inherent* from the disclosure of '216 in the absence of evidence to the contrary. However, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 28 U.S.P.Q.2D 1955, 1957 (Fed. Cir. 1993). To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. See MPEP § 2112 and In re Robertson, 49 U.S.P.Q.2D 1949, 1950-51 (Fed. Cir. 1999).

'216 does not disclose applying an anti-microbial formulation to at least one of two surfaces in a pre-selected pattern as required by claim 16. For example, '216 discloses impregnating the anti-microbial formulation throughout its sponges and wipes, in most cases by direct injection of the formulation into the center of the sponge. See Examples A-C on pages 8-9 of '216. Likewise, claim 38 is not inherently disclosed by the disclosure of '216 because an injection into the middle of a sponge is not equivalent to claim 38's limitation of said formulation covers from about 10% to about 60% of said at least one surface of the web. Also, claims 39 and 40 require the formulation to be applied to the surface of the web. Claims 41 and 42 depend from an independent claim that is not inherently anticipated by '216, and thus, claims 41 and 42 are not inherently disclosed by '216.

In sum, claims 16-19 and 38-42 of the present application are not *inherently* disclosed by '216 because the components are not the same. The claim 1 limitation of which web retains liquid after each rinse cycle, and which formulation releases sufficient anti-microbial agent into the retained liquid after each of at least five normal rinse cycles so that the retained liquid is an anti-microbial solution is not inherently disclosed by '216 because its biocidal compositions' low water solubility would render any liquid left behind by the sponges *substantially free* of the biocidal composition.

Therefore, the Examiner is respectfully requested to withdraw the rejection of claims 1-3, 6-8, 13, 15-19, 22-27, 30-31 and 37-42 under 35 U.S.C. § 102(b) as being anticipated by EP O 869,216.

The Examiner also rejected claims 1-5, 13-20, 22-29, and 37-42 under 35 U.S.C. § 102(b) as being anticipated by EP O 709,507 ('507). The Examiner also stated that claims 1, 16-19 and 38-42 were *inherent* from the disclosure of '507 in the absence of evidence to the contrary. '507 teaches the use of a "slow release sanitiser. . . which even survives washing of the non-woven article." See page 3, lines 48-50. Thus '507 teaches that the sanitiser must remain bound to the non-woven article. In fact, the sanitiser of '507 is bound so tightly that it is capable of remaining bound even after repeated washings. See page 3, Example 3.

On the other hand, applicants claim a wiper article having an antimicrobial agent that is released into a liquid that comes in contact with the wiper. Applicants' wiper releases sufficient anti-microbial agent into a liquid so that the liquid becomes an effective anti-microbial solution. Therefore, '507 fails to anticipate, inherently or expressly, applicants' claim 1 limitation of which formulation releases sufficient anti-

microbial agent into the retained liquid after each of at least five normal cycles so that the retained liquid is an anti-microbial solution.

Also, there is no teaching in '507 for the prevention of microbial growth on the surface of a non-woven fabric to less than the entire surface of the web. '507 cannot inherently teach coating the sanitiser to less than the entire surface when the main focus of its teachings are to prevent microbial growth on the fabric. Thus, claims 16-19 and 38-40, are not inherently disclosed by '507. Claims 41 and 42 depend from an independent claim that is not inherently disclosed by '507, thus claims 41 and 42 are also not inherently anticipated. The Examiner is respectfully requested to withdraw the rejection of claims 1-5, 13-20, 22-29, and 37-42 under 35 U.S.C. § 102(b) as being anticipated by EPO 709,507.

The Examiner also rejected claims 1-5, 16-19, 22-29, and 38-42 under 35 U.S.C. § 102(b) as being anticipated by EPO 113,254 ('254). The Examiner also stated that claims 1, 16-19 and 38-42 were *inherent* from the disclosure of '254 in the absence of evidence to the contrary.

'254 discloses the prevention of microbial growth on the surface of a non-woven fabric and thus, requires the antimicrobial agent to remain with the fabric. See page 3, lines 1-8 and 24-29. Also, '254 discloses that a fabric which releases the antimicrobial agent into a contacted liquid solution is undesirable. See page 2, lines 29-31. Thus, the entire disclosure of '254 is directed towards the prevention of microbial growth in or on the surface of the fabric itself.

In contrast, applicants claim a wiper having an antimicrobial agent that is released into any liquid that comes in contact with the wiper. Applicants' wiper releases

sufficient anti-microbial agent into a liquid so that the liquid becomes an effective anti-microbial solution. Therefore, '254 fails to anticipate applicant's claimed limitation of which formulation releases sufficient anti-microbial agent into the retained liquid after each of at least five normal cycles so that the retained liquid is an anti-microbial solution.

Also, there is no teaching in '254 for the prevention of microbial growth on the surface of a non-woven fabric to less than the entire surface of the web. '254 cannot inherently teach coating the antimicrobial agent to less than the entire surface when the main focus of its teachings are to prevent microbial growth on and in the sponge or fabric. Thus, claims 16-19 and 38-40, are not inherently disclosed by '166. Claims 41 and 42 depend from an independent claim that is not inherently disclosed by '254, thus claims 41 and 42 are also not inherently anticipated.

Because the '254 disclosure does not teach, *inherently* or expressly, each and every limitation found in applicants' claims, the Examiner is respectfully requested to withdraw the rejection of claims 1-5, 16-19, 22-29, and 38-42 under 35 U.S.C. § 102(b) as being anticipated by EPO 113,254.

The Examiner rejected claims 1-2, 9-10, 13, 15-19, 22-27, 32-34, and 37-42 under 35 U.S.C. § 102(b) as being anticipated by WO 90/02166 ('166). The Examiner also stated that claims 1, 16-19 and 38-42 were *inherent* from the disclosure of '166 in the absence of evidence to the contrary.

'166 discloses "sandwiching" solid chlorine releasing particles in an adhesive polymer between two substrate layers by using heat and pressure to melt the layers together. See page 6, lines 17-21. In contrast, applicant's claim 1 requires adhering

said formulation to an absorbent web. Applicant's submit that trapping "solid chlorine releasing particles" in an adhesive between to substrate layers does not anticipate applicants' claim limitation of adhering an antimicrobial formulation to an absorbent web. Furthermore, '166 is silent as to how many rinse cycles the article can sustain and still provide an effective antimicrobial solution. Therefore, '166 fails to anticipate, *inherently* or expressly, applicant's claim 1 limitation of which formulation releases sufficient anti-microbial agent into the retained liquid after each of at least five normal cycles so that the retained liquid is an anti-microbial solution.

Also, there is no teaching in '166 for "sandwiching" solid chlorine releasing particles in an adhesive polymer between two substrate layers to less than the entire surface of the web. Thus, claims 16-19 and 38-40, are not inherently disclosed by '166. Claims 41 and 42 depend from an independent claim that is not inherently disclosed by '166, thus claims 41 and 42 are also not inherently anticipated. The Examiner is respectfully requested to withdraw the rejection of claims 1-2, 9-10, 13, 15-19, 22-27, 32-34, and 37-42 under 35 U.S.C. § 102(b) as being anticipated by WO 90/02166.

The Examiner rejected claims 1-2, 11-19, 22-27, and 35-42 under 35 U.S.C. § 102(b) as being anticipated by "WO 90/02166." However, applicants, for purposes of this response, have interpreted the Examiner to have actually intended the rejection to be made in light of U.S. Patent No. 5,629,081 to Richards, et al (Richards). The Examiner confirmed this to be true in a telephone conversation with Robert Thomas on February 3, 2003. The Examiner faxed a summary of this telephone conversation to the applicants on the same day making record of the fact that the rejection was actually

intended to be made in light of U.S. Patent No. 5,629,081 to Richards, *et al* (Richards). Applicants wish to thank the Examiner for her time in resolving this issue.

The Examiner also stated that claims 1, 16-19 and 38-42 were *inherent* from the disclosure of Richards in the absence of evidence to the contrary. Richards' 'wet-wipe' product teaches the use of a "preservative system" (i.e., antimicrobial) within a lotion that coats the 'wet-wipe.' See col. 4, lines 57-67 through col. 5, lines 1-10. The preservative system lotion coats the entire surface of the 'wet-wipe.'

However, applicants' claim 1 requires adhering said formulation to an absorbent web. Merely soaking the wet-wipe in a lotion that comprises a preservative is not adhering an antimicrobial formulation to an absorbent web as required by applicant's claim 1. Moreover, a careful reading of applicants' present application would teach one of ordinary skill in the art that Richard's 'wet-wipes' could not sustain five rinse cycles and still provide an effective antimicrobial solution. See page 2, lines 1-8 of the present application. Therefore, Richards also fails to anticipate, inherently or expressly, applicant's claim 1 limitation of which formulation releases sufficient anti-microbial agent into the retained liquid after each of at least five normal cycles so that retained liquid is an anti-microbial solution.

Also, there is no teaching in Richards for adhering the "lotion" to less than the entire surface of the 'wet-wipe'. Thus, claims 16-19 and 38-40, are not inherently disclosed by Richards. Claims 41 and 42 depend from an independent claim that is not inherently disclosed by Richards, thus claims 41 and 42 are also not inherently anticipated. Accordingly, the Examiner is respectfully requested to withdraw the

rejection of claims 1-2, 11-19, 22-27, and 35-42 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,629,081 to Richards, *et al.*

In sum, in view of the foregoing arguments, we respectfully submit that the rejected claims are patentably distinct over the references cited by the Examiner and meet all other statutory requirements. We believe that the present Application is now in complete condition for allowance and, therefore, respectfully request the Examiner to reconsider the rejections in the Office Action and allow this Application. We invite the Examiner to telephone the undersigned should any issues remain after the consideration of this response.

Please charge any additional fees that may be required to Deposit Account No. 50-2548.

Respectfully requested,

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VERSION WITH MARKED-UP CHANGES

4. A method as defined in claim 2, wherein said polymer [comprises] is a latex adhesive.

7. A method as defined in claim 6, wherein said [anti-microbial formulation comprises a] source of anti-microbial metal ions [of a metal] are selected from the group consisting of silver, copper, zinc, mercury, antimony, lead, bismuth, cadmium, chromium and thallium.

8. A method as defined in claim 7, wherein said metal [comprises] is silver.

12. A method as defined in claim 11, wherein said quaternary ammonium compound [comprises] is alkyl aryl benzalkonium chloride.

14. A method as defined in claim 1, wherein the adhering of said anti-microbial formulation comprises spraying the anti-microbial formulation onto said absorbent web.

15. A method as defined in claim 1, wherein the adhering of said anti-microbial formulation comprises printing the anti-microbial formulation onto said absorbent web.

16. A method as defined in claim 1, wherein said absorbent web has at least two surfaces, said anti-microbial formulation being applied to said at least one of said two surfaces of said absorbent web in a pre-selected pattern.

17. A method as defined in claim 16, wherein said anti-microbial formulation covers from about 10% to about 60% of said at least one surface of said absorbent web.

18. A method as defined in claim 1, wherein said anti-microbial formulation covers from about 20% to about 40% of said at least one surface of said absorbent web.

19. A method as defined in claim 16, wherein said anti-microbial formulation covers from about 10% to about 60% of both surfaces of said absorbent web.

20. A method as defined in claim 2, further comprising the step of curing said polymer mixture after said anti-microbial formulation has been applied to said absorbent web.

21. A method as defined in claim 16, further comprising the step of creping said at least one surface of said absorbent web to soften said absorbent web after said anti-microbial formulation has been applied to said absorbent web.

22. A method as defined in claim 1, wherein said fibers of said absorbent web comprise pulp fibers.

23. A method as defined in claim 1, wherein said fibers of said absorbent web comprise synthetic fibers.

24. A method of forming an anti-microbial wiper for disinfecting hard surfaces comprising the steps of:

providing an absorbent [cloth-like] base web containing fibers and capable of retaining liquid after a rinse cycle, said absorbent web having two outer surfaces; and

adhering an anti-microbial formulation to said absorbent web, said anti-microbial formulation comprising an anti-microbial agent and a polymer, said anti-microbial formulation containing an anti-microbial agent being capable of activation when said absorbent web is contacted with a liquid, said activation including the release of a portion of said anti-microbial agent into the retained liquid to form an anti-microbial solution, said polymer being capable of controlling the rate of release of the anti-microbial agent from the anti-microbial formulation so that said anti-microbial solution is formed after at least five rinse cycles.

26. A wiper capable of providing liquid anti-microbial solution after numerous rinse cycles comprising:

a controlled release anti-microbial formulation comprising an anti-microbial agent, which formulation is adhered to

an absorbent[, cloth-like] web which retains liquid after each rinse cycle,

which anti-microbial formulation releases sufficient anti-microbial agent into the retained liquid after each of at least five normal rinse cycles so that the retained liquid is an anti-microbial solution.

28. A wiper as defined in claim 27, wherein said polymer [comprises] is a latex adhesive.

30. A wiper as defined in claim 26, wherein said [anti-microbial agent comprises a] source of anti-microbial metal ions [where the metal is] are selected from the group consisting of silver, copper, zinc, mercury, antimony, lead, bismuth, cadmium, chromium and thallium.

31. A wiper as defined in claim 30, wherein said metal [comprises] is silver.

36. A wiper as defined in claim 28, wherein said quaternary ammonium compound [comprises] is alkyl aryl benzalkonium chloride.

38. A wiper as defined in claim 26, wherein said anti-microbial formulation covers from about 10% to about 60% of said at least one surface of said absorbent web.

39. A wiper as defined in claim 26, wherein said anti-microbial formulation covers from about 20% to about 40% of said at least one surface of said absorbent web.

40. A wiper as defined in claim 26, wherein said anti-microbial formulation covers from about 10% to about 60% of both surfaces of said absorbent web.

41. A wiper as defined in claim 26, wherein said fibers of said absorbent web comprise pulp fibers.

42. A wiper as defined in claim 26, wherein said fibers of said absorbent web comprise synthetic fibers.